

# LIANG WANG

☎ 18916083381 ✉ [liang.wang@cripac.ia.ac.cn](mailto:liang.wang@cripac.ia.ac.cn) 🏠 [Homepage](#) 📄 [Google Scholar](#) 🐙 [GitHub](#) 知乎 [Zhihu](#)

## Education

### Institution of Automation, Chinese Academy of Sciences

Beijing, China

*Ph.D. in Pattern Recognition and Intelligent Systems (selected for the PhD honors program)*

2021 - 2026 (Expected)

- Center for Research on Intelligent Perception and Computing ([CRIPAC](#))
- Advisors: Prof. [Liang Wang](#), [Qiang Liu](#), and [Shu Wu](#)
- Research Interests: AI for Science, Graph Representation Learning, Data Mining

### Tongji University

Shanghai, China

*B.Eng. in Software Engineering*

2017 - 2021

- GPA: 4.86/5.00 (Ranking 3/214, Top 1.4%)
- Honors and Awards: National Scholarship (Top 1%), Outstanding Graduate of Shanghai (Top 5%)

## Selected Publications

### Rethinking Graph Masked Autoencoders through Alignment and Uniformity

- [Liang Wang\\*](#), [Xiang Tao\\*](#), [Qiang Liu](#), [Shu Wu](#), [Liang Wang](#)
- *AAAI 2024*

### DIVE: Subgraph Disagreement for Graph Out-of-Distribution Generalization

- [Xin Sun](#), [Liang Wang](#), [Qiang Liu](#), [Shu Wu](#), [Zilei Wang](#), [Liang Wang](#)
- *KDD 2024*

### GSLB: The Graph Structure Learning Benchmark

- [Zhixun Li](#), [Liang Wang](#), [Xin Sun](#), [Yifan Luo](#), [Yanqiao Zhu](#), [Dingshuo Chen](#), [Yingtao Luo](#), [Xiangxin Zhou](#), [Qiang Liu](#), [Shu Wu](#), [Liang Wang](#), [Jeffrey Xu Yu](#)
- *NeurIPS 2023*

### Bi-Level Graph Structure Learning for Next POI Recommendation

- [Liang Wang](#), [Shu Wu](#), [Qiang Liu](#), [Yanqiao Zhu](#), [Xiang Tao](#), [Mengdi Zhang](#), [Liang Wang](#)
- *IEEE Transactions on Knowledge and Data Engineering*

### Semantic Evolvment Enhanced Graph Autoencoder for Rumor Detection

- [Xiang Tao](#), [Liang Wang](#), [Qiang Liu](#), [Shu Wu](#), [Liang Wang](#)
- *WWW 2024*

### CAMLO: Cross-Attentive Multi-View Network for Long-Term Origin-Destination Flow Prediction

- [Liang Wang](#), [Hao Fu](#), [Shu Wu](#), [Qiang Liu](#), [Xuele Tan](#), [Fangsheng Huang](#), [Mengdi Zhang](#), [Wei Wu](#)
- *SDM 2024*

### Enhancing Temporal Knowledge Graph Forecasting with Large Language Models via Chain-of-History Reasoning

- [Yuwei Xia](#), [Ding Wang](#), [Qiang Liu](#), [Liang Wang](#), [Shu Wu](#), [Xiaoyu Zhang](#)
- *ACL 2024 (Findings)*

### Personalized Interest Sustainability Modeling for Sequential POI Recommendation

- [Zewen Long\\*](#), [Liang Wang\\*](#), [Qiang Liu](#), [Shu Wu](#)
- *CIKM 2023 (Short Paper)*

## Selected Projects

### PyGCL: A PyTorch Library for Graph Contrastive Learning

<https://github.com/PyGCL/PyGCL>

- ☆ Github Star: 853
- An easy-to-use library for graph contrastive learning with PyTorch. It implements a wide variety of contrastive objectives, data augmentations, contrasting modes and other utilities useful for implementing and evaluating contrastive learning on graphs.

### GSLB: A Benchmark of Graph Structure Learning

<https://github.com/GSL-Benchmark/GSLB>

- ☆ Github Star: 96
- An open-source library built for easy implementation and evaluation of graph structure learning model family. It offers a versatile control of graph dataset loading, structure learners, structure processors, and a bunch of reproduced models.

## Internship

---

### Graph Learning Group, NLP Center, Meituan Inc.

Beijing, China

*Research Intern*

*Sept. 2021 - Oct. 2022*

- Conducted research on graph self-supervised learning and graph-based spatial-temporal data mining. The research results have been published in IEEE TKDE and SDM 2024.

### CRIPAC, Institution of Automation, Chinese Academy of Sciences

Beijing, China

*Research Intern*

*Feb. 2021 - Jun. 2021*

- Conducted research on dynamic graph structure learning for multivariate time series forecasting.

### Advertising Department, ByteDance Inc.

Shanghai, China

*Machine Learning Engineer Intern*

*Jul. 2020 - Dec. 2020*

- Supported the improvement of advertising machine learning models, and the development of the advertising system.

## Talks

---

**Denoising-based 3D Molecular Pre-training**, 2024, [Slides](#)

**Generative Graph Self-Supervised Learning**, 2023, [Slides](#)

**Graph Transformers**, 2022, [Slides](#)

**Graph Self-Supervised Learning and Pre-Training**, 2021, [Slides](#)

## Academic Services

---

**Conference Reviewers:** KDD 2024, NeurIPS 2024

## Technical Skills

---

**Programming Languages:** Python, C++, Matlab, Java, C#

**Machine Learning Frameworks:** PyTorch, PyTorch Geometric (PyG), Deep Graph Library (DGL)

**Others:**  $\text{\LaTeX}$ , Git